

The right of the people to well known botanical names in common use is not likely to obtain much consideration from the herbarium botanist, neither is the application of a statute of limitations to fix definitely the acceptance of such names, yet there is good legal analogy for such a method of treatment, and it would be the business-like and the most familiar way to deal with the subject from a practical standpoint. The advocates of the "strict priority rule" no doubt started with the best intentions and after much careful consideration, but it now seems as if they regarded more the framing and enforcement of an easy rule to follow than a practical rule to secure the most good. Surely their attempts to simplify botanical nomenclature have not given us much relief as yet, and in very many cases show more the ill-directed zeal of the pedant, than the calm, deliberate, common sense judgment of the master. In their attempt to suppress individual dictation in specific cases they claim for themselves the right to dictate the acceptance of a rule that many of us are far from being convinced is the only rule to be followed. We must take the *ipse dixit* dose at the outset instead of later: that is all! Moreover recent events show that this rule, like any rule based on historical facts, does admit of difference of opinion in specific cases, the very evil, I judge, they sought to avoid. Altogether the present condition of botanical nomenclature shows the usual result of allowing theorists to deal with practical matters; for I maintain most stoutly that botanical nomenclature is a living, practical, popular question, and deserves to receive common sense, business-like treatment where there is need of it.

What I have said applies only of course to the so-called "strict priority rule," that extreme, that hard-and-fast rule which enforces priority without exception, reasonable or unreasonable. That priority furnishes a sound foundation for a satisfactory system of nomenclature seems to me beyond dispute, and the work that is being done in many directions is most useful and helpful. When, however, the application of the rule becomes more an object than the avoidance of confusion, when the digging up of long dead, often still-born names becomes of more importance than the retention of names well known and for years accepted by both popular and scientific usage, then many of us feel that temperance is indeed a virtue in questions of botanical nomenclature as well as in other matters of life. Let us at least wait for the action of a Botanical Congress possessing authority, before we accept the tyranny of a rule that knows no exception, listens to no reason, and claims for itself with very little justice, the inviolability of a natural law.—EDWARD L. RAND, *Boston, Mass.*

NOTES AND NEWS.

Dr. A. W. SCHIMPER, of Bonn, has declined a call to the University of Marburg on account of his health.

OUR ATTENTION has just been called to a misleading error on page 199 which escaped correction in the proof. In line 16 from the bottom *Pirus* should read *Pinus*.

MR. FRANCIS DARWIN'S address, as President of the Biological Section of the British Association, was upon "Growth-curvatures in plants."

A NEW "Old-man Cactus," from Lower California, is figured and described by C. R. Orcutt in *Garden and Forest* (Sept. 16). It bears the name of *Cereus Sargentianus*.

IN EXPERIMENTING upon the climatic conditions for the development of nicotine in tobacco plants, Mr. A. Mayer concludes that increase of heat, light and atmospheric moisture all increase the percentage of this alkaloid.

THE *American Journal of Science* has begun an interesting series of papers, by Dr. George L. Goodale, describing the museums and botanical gardens in the equatorial belt and in the South Seas, which the author recently visited.

IN THE FIRST report of the Sugar-cane experiment station in West Java, W. Krüger has a paper on the diseases and enemies of sugar-cane, which would probably be of value to some of our southern stations. It is published by G. Schönfeld, Dresden.

THE FERNS collected during the past three years in Mexico by Mr. Pringle are being enumerated by Mr. George E. Davenport in *Garden and Forest*. The new species described in the first two parts are *Asplenium Pringlei* (Sept. 23), *A. dubiosum* and *Hemionitis elegans* (Oct. 14). The first and last are figured.

BEYERINCK has proposed¹ a neat test for the excretion of acids by bacteria. He adds to the nutrient medium enough finely divided chalk to make it milky white and opaque. On growing acid-forming microbes in such a medium the colonies of these will render the opaque medium transparent in their vicinity, owing to the solution of the carbonate.

THE *Journal of Mycology* is making itself more and more useful to mycologists, both those of the experiment stations and those who can study mycology for its own sake. Vol. VII, no. 1, issued Sept. 10, marks a new epoch, as it becomes with this new volume the organ of a Division of the Department of Agriculture, and not simply of a section of the Botanical Division.

VINES OBJECTS to Wortmann's view (see this journal xv. 346) that green leaves contain no diastase or only such a small quantity that it is insufficient to account for the transformation of the starch they manufacture into sugar. He has re-investigated the subject and his recent experiments point to the same conclusions as the earlier ones of Baranetzky and Brasse, namely, that there is diastase present in green leaves, and that it does convert the starch into a sugar.

MR. T. S. BRANDEGEE has just published a paper on the "Flora of the Cape Region of Baja California." This very interesting region, known until recently only from the Sulphur and Xantus collections, is being thoroughly investigated by Mr. Brandegee, and also by the Bo-

¹Centralb. f. Bakt. 9. 781.

tanical Division of the Department of Agriculture. The present paper brings the scattered material together, 179 species being enumerated, 29 of which are new.

A RUST of carnation pinks (*Uromyces caryophyllinus* Schrœt.) has appeared in several places in Indiana, and threatens to be a serious pest to florists. It was brought to the attention of Dr. J. C. Arthur the middle of last month, and investigations show that it is already well distributed in the state, some large greenhouses not having a plant free from it. It has long been known in Germany and southern Europe, but this is believed to be the first time it has been reported in this country.

PROF. LUCIEN M. UNDERWOOD, of DePauw University, Greencastle, Ind., has decided to devote his time exclusively to botany, and offers his entomological library for sale. It contains sets, mostly complete, of American serial publications, the nine Missouri reports by Riley, bound in 2 vols., with index; Fitch's fourteen reports bound in 3 vols., with MS. index; Löw & Osten Sacken's Diptera complete, and many other rare and valuable works. It also includes the nearly complete literature on N. A. Arachnida.

THE ORCUTT Seed and Plant Co., San Diego, Calif., announce the preparation of herbarium specimens of all cultivated plants, which they intend to test at San Diego. The labels will give botanical and vernacular names, descriptions drawn from the fresh plant, color, historical, economic and cultural notes. It is hoped that botanists and horticulturists will lend assistance to the work, as cultivated plants are generally neglected in herbaria.

THE ROYAL Danish Academy of Sciences at Copenhagen offers two prizes of 400 and 600 kronen, respectively, (a) for investigations on the sorts and proportions of the more important carbohydrates present at different stages of ripeness of the four chief cereals; and (b) for investigations of the Phytoptus galls which are found in Denmark with a monographic treatment of the species of the genus of insects producing them. The latter investigation is desired especially to clear up the question as to whether on the same species of plant a given species of Phytoptus may produce different galls at different stages of its development. The prizes are to be awarded in October, 1893.

SOME RECENT researches by Drs. Frank and Otto, of Berlin, have shown that the green leaves of plants are at evening richer in nitrogen than in the morning, and that the leaves themselves show an accumulation of nitrogen, when they are separated from the plant, placed in water and exposed to the direct sunlight. These investigators deduce from their results some conclusions as to the harvesting of plants for fodder (such as clover) which need testing on a practical scale. They recommend the cutting of clover late in the day, preferably toward sunset of a warm, clear day, in order that the greatest amount of the nitrogenous foods, which have the highest nutritive value, may be secured.

IWANOWSKY AND POLOFZOFF describe in the Mémoires of the St. Petersburg Academy (VII. xxvii. n. 7) a spot disease of tobacco, caused

by a deficient supply of water, which may be occasioned either by a poor development of the root system owing to a lack of potash in the soil, or to lack of moisture in the soil owing to poor cultivation. The spots appear on the lower leaves first, and spread to the upper. They are of very different form and size, frequently enlarge and fuse, and sometimes the tissue involved breaks away entirely. The whole mischief is often wrought in two or three days. Is not the plant subject to the same trouble in this country? Better tillage, selection of ground, with proper exposure and rotation of crops are advised.

THE STUDY of the peach yellows has been a most discouraging task, but Mr. Erwin F. Smith, who has for several years been at work upon the disease for the Department of Agriculture, has shown great perseverance in its investigation. In an address before the Peninsula Horticultural Society at Easton, Md., he asserts that the disease on that peninsula is increasing, and that he has definitely ascertained by inoculation experiments that the disease is contagious. No preventive measures or treatment have been able to check it in the least. In Michigan, however, the eradication of every diseased tree has practically suppressed the trouble, and this is recommended to the Delaware and Maryland growers. While several organisms have been found associated with the diseased tissues, none has yet been proved to be the cause of the malady.

THE LAST PART of *Pittonia* (Vol. II., part 10), just issued, is an interesting one, as all the parts are. Of course numerous new species are described. *Achætogeron* is included under *Erigeron* and its species properly renamed. The most interesting part is always that which deals with ancient names of genera, as one never knows what unheard-of name is to be suggested for his old friends. In the present paper 9 genera are thus treated and their 79 species renamed. *Polanisia* is changed to *Jacksonia* Raf., *Wistaria* to *Kraunhia* Raf., *Riddellia* to *Psilostrophe* DC., *Troximon* to *Agoseris* Raf., *Pyrrhopappus* to *Sitilias* Raf., *Cordylanthus* to *Adenostegia* Benth., *Echinosperrum* to *Lappula* Mœnch., *Microstylis* to *Achroanthes* Raf., and *Symplocarpus* to *Spathyema* Raf. A new and promising field of nomenclature is opened up in the case of revertible names. No genus is now to be allowed to bear a revertible name (that is one that appears as the more ancient synonym of any other genus). Accordingly, simply by way of mentioning "but a few out of many changes" which are promised, the author proceeds to coin generic names. *Pickeringia* Nutt. is renamed *Xylothermia*; *Nuttallia* T. & G. is *Osmaronia*; *Darlingtonia* Torr. is *Chrysamphora*; *Crantzia* Nutt. is *Lilæopsis*; *Rafinesquia* Nutt. is *Nemoseris*; *Torreya* (used with 5 genera) is *Tumion* (this time of Raf.). In the same part, Professor Greene replies to the criticisms that have been made of his citation of ancient botanical authors, and also inveighs against the *Negundo Negundo* and *Catalpa Catalpa* departure in nomenclature.